For information, contact:

Preston Kiss
Huntsville Center
Phone 256-895-1889

U.S. Army Engineering & Support Center, Huntsville
4820 University Square
Huntsville, Alabama 35816-1822
Fax 256-895-1737
http://www.hnd.usace.army.mil/oew/tech/techindx.html

remote video inspection

Reliable remote surveillance—to go

Part of a portable unit, the RVI scope is manipulated much like a periscope to inspect for ordnance where distance viewing is desirable, as in the case of chemical warfare materiel. With a 7.5-meter "snakelike scope," the RVI system can literally see behind walls.

Portable, Remote Viewing RVI technology is based on the concept of a remote surveillance camera but has been modified into a portable system. The lens can be manipulated through a hand-held device that is attached to the system's scope. The lens is enclosed in a 5/16-inch head that is part of a 7.5-meter scope, which is in turn attached to a control unit and monitor.

Lighting the subject The system's light source is a 150-watt halogen bulb, which is fed through the scope and surrounds the lens, illuminating the surrounding area up to tens of feet. The available lenses have a 60- to 100-degree field-of-view that, when coupled with the system's unique maneuverability and lighting capabilities, means areas such as bunkers, wells, or other poorly lit and confined spaces are easily viewed from a safe distance.

The system also includes a light-sensitivity device that ensures proper lighting and adjusts for distance. The system can also be switched from an automatic illumination to a manual illumination mode. Through the auto-focus, the lens can accurately focus on an object within a range of several millimeters to infinity.

Imaging Advances The technology used in this camera is the same type of technology used by the medical profession. Although RVI system still depends on fiber optics to send the light, it uses electronic impulses to return the image, so that images are processed and displayed clearly, as on any other high quality video.

Recording Findings The system can also be connected to a VCR, so video tapes of areas can be made for study, analysis, or reference.